A. Sharing Provides Substantial Public Interest Benefits

As Pinpoint and others have explained since the start of this proceeding, spectrum sharing provides ample tangible benefits to the public at large. The most important benefit flows from what spectrum sharing actually implies: the opportunity for competitive entry by multiple service providers. In contrast to the comments of PacTel and MobileVision, the FCC's proposal -- and Pinpoint's view -- is that spectrum sharing will permit a range of providers to offer a broad menu of new services. Moreover, the presence of competition will ensure that each provider has maximum incentive to innovate and improve its services (and its spectral efficiency). Quite simply, the weakness of the duopolists' proposal is its failure to provide these advantages.

Thus, for example, open entry implies increased competition in wide-area

market with only two producers -- a duopoly market -- is unlikely to have a competitively set price that is at or near the cost of producing the good."[50] A fully competitive environment also makes less obtrusive FCC oversight possible, saving agency resources as well.

The open entry proposed by the Commission and endorsed by Pinpoint would also preserve greater incentives for rapid technological innovation. Monopolists have few incentives to implement new technologies; at best, duopolists -- like PacTel and MobileVision -- only a little more. By contrast, a scheme in which a larger number of entities vied for market share would provide a much greater stimulus for new ideas to enter the market. As the FCC's Office of Plans and Policy noted in the context of PCS, "[t]he competitive market formed by issuing several licenses engenders strong incentives for suppliers to develop the market quickly in advance of other competitors."[51]

Pinpoint, for example, has applied to construct a system materially different, and with greater capacity, than PacTel's. Pinpoint, alone among current applicants or licensees, will build a system designed to accommodate intelligent-vehicle highway systems, to the benefit of the public. New technologies that promise other services are much more likely to win a place in the market if the allocation and licensing scheme

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[50] United States General Accounting Office, Concerns About Competition in the Cellular Telephone Service Industry at 19 (July 1992).

[51] D. Reed, Office of Plans and Policy, Putting it All Together: The Cost Structure of Personal Communications Services, OPP Working Paper No. 28 at 53 (Nov. 1992) ("Opp Working Paper No. 28").

supports a larger number of competitors.[52] As Pinpoint noted in its opening comments, this is particularly important to meet the new IVHS requirements now being established.

The increased competition and technological innovation promised by the Commission's sharing approach invariably will lead to greater diversity of consumer choice. Under a monopoly, consumers can select only a single type of service; under most duopolies, consumers get a choice of two, although here it appears that both the PacTel and MobileVision systems are virtually identical.[53] Under the open entry scheme, consumers will be able to select from a myriad of approaches best suited to individual needs. In particular, competitive entry could preserve flexibility of the *bandwidth* used by various systems, permitting the marketplace to select the most appropriate approaches. Similar consumer choice in domestic telephony has driven the growth of numerous custom plans and offerings, individually tailored to particular demands.

In sum, the proposals of spectrum incumbents PacTel and MobileVision would require the Commission to "pick" technological winners and losers, and would force the agency to make that choice virtually in a vacuum. Indeed, the choice would be made solely because a licensee had been granted an authorization as of some particular

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[52] Further, under Pinpoint's plan, where transfers and assignments would be possible after a system is constructed, the opportunity for new technologies to be realized by new entrants gaining access through such methods is measurably greater.

[53] *See, e.g.*, MobileVision Comments at 30-31.

date in the past, a result PacTel's affiliate, PacTel Paging, abhors.[54] But, long experience has taught that the marketplace can best select the most appropriate technologies, while fostering competition that reduces consumer costs.[55] As the Commission noted regarding PCS,

> It is our goal to provide an allocation that allows for the provision of the widest range of PCS services at the lowest cost to consumers. The most desirable allocation to accomplish this goal would be one large enough to accommodate all entities interested in providing PCS services. Such an allocation would allow market forces to determine the optimum number of service providers.[56]

The Commission should not abandon its historic endorsement of competition merely because a few companies seek protection from the marketplace. As it is proposing in PCS, Pinpoint submits that the Commission should craft LMS rules and policies that preserve the opportunity for genuine competition.

B. PacTel and MobileVision's Arguments Fail to Undermine the Commission's Pro-Competitive Approach

In their desperate efforts to retain exclusive rights to provide 900 MHz wide-area services, PacTel and MobileVision raise a host of theoretical objections to

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[54] *See supra* p. 3.

[55] *See* App. C at 4-6; *Allocation of the 849-851/894-896 MHz Bands*, 5 F.C.C. Rcd 3861, 3865 (1990) (*"Air-ground Telephone Service"*), *recon.*, 6 F.C.C. Rcd 4582 (1991).

[56] *Establishment of New PCS Services*, 7 F.C.C. Rcd 5676, 5690 (1992).

competition in general and a competitive LMS environment in particular. Aided by myriad (and thick) studies, the duopolists essentially urge the Commission to "trust them," for PacTel and MobileVision know, and will serve, the public interest. This point of view has no merit; each individual contention is answered below.

First, PacTel boldly claims that competition and multiple entry in itself will not benefit consumers.[57] PacTel ignores the 1970s, 1980s and the first part of the 1990s: it is now accepted beyond cavil that competition lowers prices and increases choice to the benefit of the public.[58] Indeed, PacTel itself agrees in other contexts: in Docket

the additional service providers must provide something new to distinguish themselves

uncertainty by artificially constraining the availability of PCS licenses is not certain to speed up the rollout of PCS."[67]

Fourth, PacTel and MobileVision claim that multiple entry increases fixed costs, requiring greater infrastructure investment to provide the same capacity.[68] AT&T made the identical argument about duplicative long-distance facilities. But, neither AT&T then, nor PacTel and MobileVision now, account for the fact that the facilities inevitably are not duplicative: different service provider provide diverse services, meeting consumer needs in different ways.[69] Moreover, multiple service providers stimulate greater consumer demand for the service, thereby allocating the fixed costs over a greater base. No one would today argue the MCI or Sprint are needlessly duplicative, and Pinpoint, Southwestern Bell and other LMS applicants will not be either.

Similarly, PacTel and MobileVision claim that multiple entry increases the required overhead, decreasing spectrum efficiency.[70] The simple answer to this is: not much. With a competitive market, spectrum efficient sharing techniques will permit more efficient use of the available spectrum.[71] As discussed above, in the TDMA scheme proposed by Pinpoint, the minimal additional overhead requirements

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[67] OPP Working Paper No. 28 at 53.

[68] Pactel Comments at 36, app. 3 at 4; Mobilevision Comments at 39.

[69] *See* App. C at 9-11.

[70] PacTel Comments at 37; Mobilevision Comments at 39.

[71] *See* App. C at 8-9.

are far outweighed by the benefits of increased competition, technical innovation, and the potential for exponentially greater capacity.[72] Similar arguments were proffered in seeking a monopoly in the air-to-ground telephone rulemaking, and they were rejected there.[73]

Next, PacTel and MobileVision resist the Commission's inquiry about dividing the bandwidth for wide-area systems to, perhaps, four systems of four megahertz each.[74] Here, Pinpoint agrees that splitting the band is not in the public interest, because both ranging accuracy and capacity is exponentially proportional to available bandwidth.[75] However, it is worth noting that the protests of PacTel and MobileVision ring hollow: at present, each of those systems is using only four megahertz. Not only do PacTel and MobileVision seek exclusivity, therefore, they attempt to block entry on spectrum not even in use.

Ultimately, conceding the merits of competition and multiple entry, PacTel and MobileVision also argue that the current marketplace is competitive, citing non-LMS services, such as GPS and LoJack.[76] Indeed, MobileVision and PacTel go to such an extreme in their rush to lock up spectrum that they actually denigrate their own

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[72] *See generally* Technical Appendix.

[73] *Air-ground Telephone Service*, 5 F.C.C. Rcd at 3869.

[74] PacTel Comments at 37; MobileVision Comments at 36-37.

[75] For this reasons, Pinpoint and others have urged the Commission to open the *entire* 902-928 MHz band to both wide-area and local-area systems.

[76] PacTel Comments at 39 n.36; MobileVision Comments at 38-39.

offerings.[77] But as Pinpoint has explained,[78] the public interest is better served by many types of location services. Each technology has its own advantages and drawbacks, and consumers should be permitted the widest possible choice. Pinpoint, for example, is the only applicant or licensee that proposes to offer, or is capable of offering, very high capacity IVHS services in the 902-928 MHz band.[79] Eliminating multiple entry will eradicate the public's ability to receive this important service

Finally, PacTel makes much over the fact that exclusivity used in other services, including land mobile and paging.[80] This is, of course, true. But spectrum sharing is also used in other services, in part because of the potential for multiple entry.[81] Moreover, whatever the merits of exclusivity when allocating and assigning virgin spectrum, non-exclusivity has additional value in an environment where the spectrum is already shared among several types of uses, as is the case here. In addition, it is worth remembering that the frequencies at issue are two 8 MHz bands, effectively nationwide blocks of bandwidth given the speculative efforts of PacTel and MobileVision in a

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[77] MobileVision claims that "[t]he marketplace, according to market research studies, is only minimally interested in receiving stand alone services such as stolen vehicle recovery." MobileVision Comments at 38. PacTel characterizes systems using 4 MHz as "useless," yet concedes it is using only that much spectrum. PacTel Comments at 23-24; *see also* PacTel Reply to Oppositions to Application for Review, No. 342513 at 9 (filed June 21, 1993) (PacTel is currently using only 4 MHz).

[78] *See* Opposition of Pinpoint Communications, Inc., RM No. 8013 at 7-8 (filed July 23, 1992)("Pinpoint Opposition").

[79] Pinpoint Comments at 6-7.

[80] PacTel Comments at 41-46.

[81] For example, the air-to-ground telephone services and the radiodetermination satellite service.

shared spectrum setting, a huge amount per licensee in comparison to other allocations such as 900 MHz PCS *e.g.*, 50 kHz nationwide channels.[82]

In sum, the same Luddite arguments of PacTel and MobileVision failed to stop the development of domestic telecommunications competition in the United States, which is now being exported throughout the globe. As the American public enjoys the benefits of such multiple entry, the Commission should not revert to monopoly regulation of what will become one of the most important telecommunications services of the 21st century. Simply put, LMS is not a "natural duopoly" and should not be regulated as one. In order best to promote the growth of LMS, the Commission should

however, the Commission has proposed the alternative of granting existing wide-area licensees exclusive use of the 904-912 and 918-926 MHz bands for a period of five years, after which time the Commission would resume licensing wide-area systems on a non-exclusive basis, but require new licensees to protect existing systems.[83] As Pinpoint explained in its opposition to PacTel's petition for rulemaking, and in its initial comments on the *NPRM*, exclusivity -- even on a purportedly temporary basis -- would establish a *de facto* nationwide duopoly.[84] Because PacTel and MobileVision, the potential duopolists, already are licensed at almost fifteen hundred sites for the two 8 MHz bands in all of the largest metropolitan areas in the country and beyond, the Commission's exclusivity proposal would effectively authorize each of them exclusive use of 8 MHz bands on a nationwide basis.[85]

Given the extraordinary "leg-up" the five-year duopoly would afford PacTel and MobileVision, and in light of PacTel and MobileVision's intense opposition to sharing,[86] it is extremely unlikely that at the conclusion of the five-year exclusivity period they would cooperate in spectrum sharing initiatives with new AVM licensees,

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[83] *NPRM*, 8 F.C.C. Rcd at 2506.

[84] *See* Pinpoint Opposition at 9; Pinpoint Comments at 13-14.

[85] *Id.* at 13-14.

[86] Either PacTel, MobileVision, or both have sought to oppose virtually every license grant or application in the shared spectrum environment in the 904-912 and 918-926 MHz sub-bands in the past year, generally without procedural authority and often despite the lack of a factual basis for doing so. *See, e.g.*, Petitions to Deny of Ameritech (MobileVision), File Nos. 295053 and 295060 (filed Aug. 21, 1992); PacTel Petition to Deny Applications of Pinpoint Communications, Inc., File Nos 347483-347502 (filed Mar. 17, 1993); PacTel Petition For Reconsideration, File No. 342513 (filed Mar. 17, 1993); PacTel Application for Review, File Nos. 342513 etc. (filed May 23, 1993).

especially if the latter are required to prevent interference to their systems.[87] Indeed, their comments include not one shred of evidence to the contrary. Thus, "temporary" exclusivity would permanently preclude entry by competitors into the AVM market and deprive the public of the myriad benefits accrued from open entry into AVM/LMS.[88]

Since its initiation nearly twenty years ago, AVM licensing consistently has been conducted on a flexible, shared spectrum basis, allowing all interested and qualified parties an equal opportunity to construct and operate AVM systems.[89] Were the Commission to implement its exclusivity proposal retroactively, it would, in a single stroke, render the applications of Pinpoint and other wideband wide-area systems mutually exclusive with the applications of PacTel and MobileVision previously-granted in a shared spectrum licensing regime -- and deny them. In doing so, the Commission effectively would establish retroactive cut-off dates for hundreds of locations where PacTel and MobileVision are already licensed, denying consideration to pending applications and the opportunity of other potential competitors to file competing applications. As discussed below, such a retroactive cut-off violates the rights guaranteed under *Ashbacker v. FCC*,[90] as well as the twin principles upon which it is premised: regulating use of the radio spectrum in a manner that will best serve the

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[87] Pinpoint Comments at 13-14.

[88] Pinpoint Opposition at 13-14; Pinpoint Comments at 13.

[89] *See* 47 C.F.R. §§ 90.173(a), 90.239 (1992); *NPRM*, 8 F.C.C. Rcd at 2502, 2504.

[90] 326 U.S. 327 (1945).

public interest, and preserving fairness in the licensing process. Because the temporary exclusivity proposal is legally untenable under *Ashbacker*, the Commission should abandon it and adopt a licensing scheme that allows consumers to enjoy the public interest benefits afforded by a shared spectrum, competitive, open-entry AVM environment with well established cut-off procedures.

A. The Commission's Temporary Exclusivity Proposal Would Violate Rights to Meaningful Consideration Guaranteed By *Ashbacker* and Correlative Due Process Rights

Qualified applicants must be given comparative consideration before the Commission grants a mutually exclusive license application.[91] Closely associated and inextricable from the *Ashbacker* decision are applicants' due process rights to proper notice of cut-off of pre-existing privileges. If the Commission were to implement its exclusivity proposal, the applications of Pinpoint and other wideband applicants would be denied any "hearing" or meaningful consideration, and would be cut-off without prior notice. Retroactive exclusivity, therefore, would defy *Ashbacker* by short-circuiting its requirement for equal consideration and abrogating correlative due process rights.

In *Ashbacker*, the Court considered whether, in granting one of two mutually exclusive applications and setting the other for hearing, the Commission denied the latter applicant the meaningful consideration to which it was entitled under the

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[91] *Id.*

Communications Act.[92] The Court found that by granting the first application before considering the merits of the latter, the Commission effectively had unlawfully precluded or "cut-off" the second application from meaningful consideration.[93] The *Ashbacker* Court focused on whether an applicant's right to a hearing on its application "[had] as a practical matter been substantially nullified by" the actions of the agency.[94]

The Commission's proposal to afford exclusive use of spectrum to existing wideband licensees falls squarely within the *Ashbacker* decision, as it would render Pinpoint and other wideband system applicants mutually exclusive with PacTel and MobileVision and, simultaneously, deny them a "hearing" or any form of meaningful consideration before the Commission.

PacTel's request for exclusivity, the basis for the Commission's proposal, could be deemed a request for modification of PacTel's and MobileVision's existing AVM licenses. While the Commission may modify licenses,[95] it cannot grant modifications that will preclude other interested parties from comparative consideration by the Commission.[96] In *Cheyenne*, the Commission considered a request by a Class A FM

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[92] *Id.* at 329-30.

[93] *Id.* at 330, 333-34.

[94] *Id.* at 334 (footnote omitted).

[95] 47 U.S.C. §§ 316(a); 309(a) (1988).

[96] *Amendment of Section 73.202(b), Table of Assignment, FM Broadcast Stations (Cheyenne, Wyoming and Terrytown, Nebraska)*, 62 F.C.C. 2d 63 (1976) (Report and Order) ("*Cheyenne*").

licensee to modify its license to specify operation on a newly assigned Class C channel in its community, Cheyenne, Wyoming, where other parties sought to apply for the new assignment. As in the instant case, the request for license modification was opposed as an attempt to freeze out the competition.[97]

Applying the *Ashbacker* doctrine, the Commission found:

> By granting petitioner's request we would be effectively foreclosing the filing of other applications by interested persons for the newly assigned channel after the effective date of the modification. In *Ashbacker Radio Corp. v. F.C.C.*, 326 U.S. 327 (1945), the Supreme Court decided that the Commission could not grant the application of one party for a new frequency without first giving comparative consideration to other mutually exclusive applications filed therewith. Without a hearing in which all mutually exclusive applications are given comparative analysis, the Commission could not make the public interest finding as to which applicant was the best qualified to render service in the public interest.[98]

To avoid cutting off the rights of other interested parties who might want to apply for the new channel, the Commission therefore denied the modification request, in the belief that "the public interest would be best served by affording other interested persons an equal opportunity to file an application and to be given consideration for the new channel."[99]

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[97] *Id.* at 65.

[98] *Cheyenne*, 62 F.C.C. 2d at 67 (footnotes omitted).

[99] *Id.*

As in *Cheyenne*, "modifying" PacTel's and MobileVision's licensees to render them exclusive through adoption of the Commission's proposal would unlawfully deny other interested parties such as Pinpoint, an equal opportunity for their applications to be given consideration, as required under *Ashbacker*.

The Commission's exclusivity proposal is also analogous to a retroactive cut-off which similarly deprives wideband system applicants of the consideration before the Commission that is mandated by *Ashbacker*. Affording exclusivity to existing wideband licensees, as discussed above, retroactively would render the applications of Pinpoint and other wideband system applicants mutually exclusive with the previously-granted applications of PacTel and MobileVision.[100] The Commission, however, would not engage in any re-licensing of these markets. Because both pending and prospective applications would be instantly and retroactively cut-off without opportunity for Commission consideration of these applications as required under the *Ashbacker* doctrine,[101] the exclusivity proposal cannot be implemented lawfully.[102]

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[100] Because of the open-entry licensing scheme that has characterized AVM licensing for the last twenty years, "mutually exclusivity" is a licensing concept that has never applied in the 902-928 MHz band. Therefore, there has never been an opportunity for Pinpoint to file applications that were "mutually exclusive" with those of PacTel and MobileVision. In an exclusive licensing regime, the grant of an exclusive license following proper procedures would, in fact, preclude the acceptance of future applications. That is not the case here, as the PacTel and MobileVision licenses have no preclusive effect.

[101] The retroactive result of the Commission's exclusivity proposal renders it wholly unlike licensing on an exclusive basis through, for example, comparative hearings or by lottery, where every interested and qualified wideband applicant, in one fashion or another, would be given the opportunity to participate in the licensing process before the Commission actually selects the exclusive licensees. While exclusive licensing in this fashion still would abrogate the public interest benefits of licensing on a shared spectrum, competitive basis -- and Pinpoint therefore does not support it -- it at least would not defeat the

(continued...)

In addition to undermining the rights of applicants to meaningful Commission consideration, the exclusivity proposal would also violate the due process rights of interested parties to receive proper notice of valuable privileges subject to cut-off. The Commission's exclusivity proposal, however, shamelessly would deny Pinpoint and other wideband system applicants such notice. The *NPRM's* licensing alternative, therefore, is legally untenable on this basis as well.

The Commission's duty to provide proper notice of actions that rescind long-standing and pre-existing privileges is well settled. For example, in *Reeder v. FCC*,[103] the court found that the FCC had not provided adequate notice of new rules governing the submission of counterproposals for an omnibus proceeding for allocating new FM channels involving intermediate mileage separation requirements. The notice provided did not indicate that the Commission was planning to abandon its long-standing policy permitting channel substitutions in order to accommodate upgrade plans. As undoubtedly it would do in this case, the court rejected the Commission's

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[101](...continued)
underlying mandate of *Ashbacker* that mutually exclusive applications be afforded some kind of meaningful consideration by the Commission.

[102] The instant case is distinguishable from cases where Commission decisions challenged on *Ashbacker* grounds have been upheld because the applications at issue in those cases did not meet valid eligibility requirements. *See United States v. Storer Broadcasting Co.*, 351 U.S. 192 (1956); *Aeronautical Radio Inc. v. FCC*, 928 F.2d 428 (D.C. Cir. 1991). The applications of Pinpoint meet the eligibility requirements. Moreover, as PacTel has correctly noted, a licensee should not receive rights retroactively merely because it was licensed as of a particular date. PacTel Paging Comments at 5 n.11.

[103] 865 F.2d 1298 (D.C. Cir. 1989).

attempt to eliminate a long-standing preexisting right without providing adequate notice beforehand.[104]

Conversion of the current open-entry licensing regime to the exclusive licensing model proposed would violate the due process rights of both existing and prospective wideband system applicants. Under the proposal, the Commission retroactively would cut off pending and future wideband system AVM applications for locations already

B. The Commission's Exclusivity Proposal Would Violate the Fundamental Fairness Issues Underlying Due Process and *Ashbacker* Rights

In addition to unlawfully violating *Ashbacker* and associated due process requirements, the Commission's proposal, endorsed by MobileVision and PacTel, conflicts with the underlying public policy and the driving forces behind *Ashbacker* and due process principles: regulating use of the radio spectrum in a manner that will best serve the public interest and preserving fairness in the licensing process.

In guaranteeing the rights of mutually exclusive applicants to meaningful consideration before the Commission, the *Ashbacker* Court recognized that comparative consideration is the best means by which the Commission can discharge its fundamental duty of selecting the use of scarce public resources in a manner that will best serve the public interest.[105] Applying the public interest framework underlying the *Ashbacker* decision to the Commission's exclusivity proposal reveals a gross conflict. Comparative hearings at least allow the Commission to examine and compare the characteristics of different service proposals and technologies. Lotteries at least afford an equal chance to all applicants who meet threshold qualifications to be licensed.

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[105] *See New South Media Corp. v. FCC*, 685 F.2d 708, 715 (D.C. Cir. 1982) (quoting *Community Broadcasting Co. v. FCC*, 274 F.2d 753, 758-59 (D.C. Cir. 1960)) (recognizing that the "court has scrutinized closely Commission contentions concerning the need for new or continued service, or for expeditious administrative proceedings, to assure that FCC action does not stray from '[t]he basic teaching of . . . *Ashbacker*. . . that comparative consideration by the Commission and competition between the applicants is the process most likely to serve the public.'").*See also* 47 U.S.C. 157(a) (Commission should pursue policy of encouraging the provision of new technologies and services to the public).

Unlike both hearings and lotteries, however, the retroactive effect of the Commission's proposal would result in the arbitrary selection of PacTel and MobileVision as the providers of AVM/LMS best suited to serve the demands of the marketplace and, ultimately, the public.

But, as discussed above, the *de facto* duopoly that would result from exclusivity would not best serve the public interest, as it would suppress competition, stifle innovation, increase the costs of services, and reduce consumer choice.[106] Reserving the field to only PacTel and MobileVision would also abrogate the public interest by frustrating important national transportation policies in support of intelligent vehicle-highway systems, and make the public captive to the extended and unpredictable construction schedules for deployment of PacTel's and MobileVision's AVM/LMS systems.[107]

These concerns are not theoretical, but both timely and real. PacTel has only deployed its system in six cities, using 4 MHz of spectrum, an amount that it has admitted makes its systems "useless."[108] MobileVision has deployed no commercial systems, despite bullish language in its comments, which is surprising in the wake of

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[106] *See* Section II, *supra*.

[107] S. Rep. No. 105, 103d Cong., 1st Sess. 39 (1993). The Committee stated that final rules in Docket 93-61 must be "consistent with the policies and goals of the Intelligent Vehicle Highway Systems Act of 1991 [and] promote the development and implementation of intelligent vehicle highway systems."

[108] PacTel Comments at 24.

allegations in a recent federal lawsuit by the former general partner, Ameritech.[109] Developers such as Pinpoint will be poised to offer services in the near future. Pinpoint is in the midst of conducting experimental testing, and is on the cusp of deploying its spectrum sharing, innovative and uniquely high capacity system.[110] By

services, upon which they relied in investing substantial resources and effort in developing their AVM systems. Given the intolerable inequity of this result, the Commission should not entertain further its exclusivity proposal.

Inherent in the *Ashbacker* decision, is the recognition that the Commission cannot afford opportunities to provide radio services to certain parties in a manner that would "in midstream" deny preexisting opportunities of other parties to provide the same radio services. Because such a "retroactive change confounds the expectations upon which persons acted,"[112] it risks a level of unfairness that violates both well-recognized limits on agency rulemaking power[113] and standards of fairness.

Based on the shared spectrum environment in which AVM licensing has long been conducted, Pinpoint has invested several years of intensive research and development as well as almost 5 million dollars to develop its wide area AVM system. Substantial investment has also been made by other AVM service providers. This investment was predicated on the assumed continuation of the current shared spectrum environment, an assumption that was reasonable given the Commission's long-standing rules. It is also on this basis that Pinpoint and others did not contest or challenge the hundreds of applications PacTel and MobileVision have filed to provide AVM in

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[112] *Hastings v. Earth Satellite Corp.*, 628 F.2d 85, 93 (D.C. Cir.), *cert. denied*, 449 U.S. 905 (1980).

[113] *See Greene v. United States*, 376 U.S. 149, 160-161 (1964) (rule cannot retroactively interfere with pre-existing rights); *Yakima Valley Cablevision, Inc. v. FCC*, 794 F.2d 737, 746 (D.C. Cir. 1986) (voiding FCC's retroactive application of cable rules); *Saint Francis Memorial Hosp. v. Weinberger*, 413 F. Supp. 323, 332 (N.D. Cal. 1975) ("Retrospective application of statutes and regulations is frowned upon where the application of such changes in the law works to deprive a party of an antecedent right.").

markets across the country. Under the current flexible, open-door licensing framework that existed when these applications were filed, there would have been little reason to file "competing applications" because mutually exclusivity was not, and had never been, recognized in the shared spectrum environment of 902-928 MHz. Clearly, Pinpoint and other existing and future wide-area system applicants had no reason to anticipate the Commission's proposed conversion of the licensing process from the current open entry model to that of exclusivity. For the Commission to impose exclusive licensing now would be like slamming the door in the face of invited guests, after allowing a steady flow of early arrivals in. Because such action would be totally inequitable and would violate standards of fairness inherently recognized in *Ashbacker*, the Commission cannot lawfully and equitably adopt its exclusivity proposal.

It is wholly obvious that PacTel, who filed for licenses for one of the two 8 MHz bands in the top 50 urban markets, but has extended its construction requirements significantly, has sought to obtain exclusivity so that it can lock-up dozens of markets unfairly. In contrast, Pinpoint has only filed applications to date for the number of systems that it is prepared to operate initially. So long as the spectrum sought by PacTel was shared, Pinpoint and others were not prejudiced by PacTel's prolific AVM application filing, and were not disserved by their own measured and judicious approach to filing applications for AVM. If the Commission affords exclusivity to PacTel, however, it will sanction PacTel's speculative tendencies and punish Pinpoint

for its more prudent approach, which the Commission should encourage in the interests of efficient and equitable use of radio spectrum.

Given the overarching principles of fairness implicated by a grant of exclusivity to the existing licensees, the Commission must, if it declines to implement sharing for wide-area multilateration systems and insists upon exclusivity, only afford exclusivity after it has provided an opportunity for all interested, qualified applicants to seek licenses. The Commission could achieve this by opening windows for the filing of applications in markets where existing licenses have been granted for the operation of wide-area AVM systems. While this approach would abrogate the numerous public interest benefits of spectrum sharing discussed above, it is the only method by which the Commission could implement exclusivity and meet the legal requirements and underlying policy concerns of the *Ashbacker* decision.

IV. WIDE-AREA AVM SYSTEMS SHOULD BE PERMITTED TO OPERATE THROUGHOUT THE ENTIRE BAND ON A SHARED BASIS WITH LOCAL-AREA SYSTEMS

In addition to demonstrating in its comments that the Commission correctly concluded in the *NPRM* that sharing among wide-area systems is both feasible and in the public interest, Pinpoint explained further that the public interest would be served if the entire 902-928 MHz band were made available for licensing to wide-area operations on a shared basis. The underlying basis for that conclusion is, first, as described above, the capacity of wide-area systems rises exponentially as the bandwidth increases